DEPARTMENT OF HEALTH & HUMAN SERVICES

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Public Health Service

Agency for Toxic Substances
and Disease Registry
Atlanta GA 30333

March 3, 1997

Mr. Leo Little
Assistant Manager for Environmental Management
U.S. Department of Energy
Richland Field Office
825 Jadwin Avenue
P.O. Box 550
Richland, Washington 99352

Dear Mr. Little:

Enclosed is the quarterly report for the first quarter of FY 1997, for activities conducted by the Agency for Toxic Substances and Disease Registry (ATSDR) at Department of Energy (DOE) facilities.

As always, we appreciate your cooperation and support as we carry out our programs with DOE.

Sincerely yours,

Mark M. Bashor, Ph.D.
Associate Administrator for
Federal Programs
Director, Office of Federal Programs

Enclosure

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY ACTIVITIES AT DEPARTMENT OF ENERGY FACILITIES FIRST QUARTER, FISCAL YEAR 1997

PUBLIC HEALTH ASSESSMENTS AND CONSULTATIONS

BROOKHAVEN NATIONAL LABORATORY, NY

- ATSDR submitted a draft health consultation on contaminated groundwater to DOE for classification review and subsequent data validation. Levels of trichloroethene (TCE), carbon tetrachloride, perchloroethene, and 1,1,1-trichloroethane (1,1,1-TCA) detected in monitoring wells could cause adverse health effects, but the levels in residential wells are much lower and are not expected to impact the health of residents.

  The full extent of groundwater contamination is uncertain. Each plume contains different contaminants. There is no indication that anyone is being exposed to all of the contaminants or plumes. As a precautionary measure, DOE has offered to connect residences to the public water supply.

- ATSDR responded to an inquiry from a resident representing the Peconic Green Party and Fish Unlimited in the Long Island area. ATSDR informed him of our work on a groundwater health consultation and the public health assessment and requested that he inform us if he had specific information that he believed ATSDR should consider.

- ATSDR staff attended a symposium sponsored by the Brookhaven Community Work Group and presented information on the public health assessment process and potential health effects associated with exposure to low levels of radiation and chemical contamination.

- ATSDR staff participated in a Department of Energy (DOE) public meeting and provided information on the ATSDR health consultation concerning contaminated groundwater at the site.

- Both the community and the DOE-Chicago Field Office have requested that ATSDR look at the air exposure pathway as the next step in the public health assessment process.

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT, OH

ATSDR staff attended the Fernald Health Effects Subcommittee meeting to provide technical assistance and to gather information related to the Fernald public health assessment.

HANFORD RESERVATION, WA

ATSDR staff continues to gather and review data for the Hanford 100 Area, which includes the reactors and Columbia River releases, the Hanford 200 Area, which was the source of iodine releases to the air, and and the Hanford 300 Area, which includes past uranium fuel rod production units and current research and development areas.

LABORATORY FOR ENERGY-RELATED HEALTH RESEARCH, CA

- ATSDR began addressing concerns expressed that groundwater contamination at the site is potentially a public health threat. ATSDR received and will be reviewing groundwater monitoring data, off-site remediation data for areas near the University of California Davis campus, and private well monitoring data.

- ATSDR attended a public meeting sponsored by the Davis South Campus Superfund Oversight Committee at the City of Davis Council Chambers to present a summary of ATSDR activities and identify community health concerns. Analytical results from the fish sampling in Putah Creek are expected in early 1997.

LAWRENCE LIVERMORE NATIONAL LABORATORIES, CA

ATSDR and California Department of Health staff toured the main and the 300 site and began initial data collection for the public health assessment which is being drafted in Fiscal Year (FY) 1997.

LOS ALAMOS NATIONAL LABORATORY, NM

ATSDR and the Environmental Protection Agency/ National Air, Radiation and Environmental Laboratory (EPA/NAREL) retrieved air monitoring data from gamma air monitors located on the San Ildefonso Pueblo and other background locations. The data is a compilation of information for three months. Results will be analyzed to determine if nearby residents (San Ildefonso Pueblo) are being exposed to short-lived gamma emitting radionuclides. The compiled data will be addressed in the public health assessment.

MONTICELLO MILL TAILINGS SITE, UT

On December 20, 1996, ATSDR released the public health assessment for public comment. The public comment period ends February 21, 1997.

- ATSDR concluded that the mill posed a public health hazard in the past when it was operating. Industrial hygiene surveys of the mill indicate that conditions were very dusty and many workers were exposed to levels of radioactive dusts above allowable concentrations. Analysis of the available health outcome data shows that San Juan County has the highest rate of renal failure among women in the state. Limited evidence suggests that there is an increased risk of lung cancer in Monticello compared to the risk for the rest of the country.

- The tailings that remain on the mill site are not a public health hazard to area residents

because access to the mill site by the public is strictly controlled.

- The community will continue to be exposed to low-level radiation at the off-site residential and commercial properties known as Monticello Vicinity Properties until remediation is complete. Since the remedial actions will eventually remove most of the contaminated soils within the residential community, long-term exposure is not a concern.

MOUND PLANT, OH

On December 2, 1996, ATSDR released the Mound public health assessment for public comment. The public comment period ends January 31, 1997.

- Under current site conditions, the Mound Plant poses no apparent public health hazard to off-site populations.

- In 1982 and 1983, there were transient releases of under-treated wastes to the Great Miami River from the Mound Laboratory sanitary sewage treatment facility that posed a temporary public health hazard to people swimming, boating, and fishing downstream in the river.

- Plutonium-238 and tritium were not released at levels that posed a public health hazard.

- There are insufficient data to fully evaluate whether non-radioactive substances released from the Mound facility ever posed a public health hazard.

- There are insufficient data to fully evaluate whether polonium-210 released to the environment ever posed a public health hazard.

- There are no useful health outcome data available for evaluating the population that might have been exposed to contamination from the Mound facility.

On the basis of the information reviewed for this public health assessment, ATSDR is not recommending health studies in the general population near the Mound Plant or among the workers at the Mound Plant.

PADUCAH GASEOUS DIFFUSION PLANT, KY

ATSDR, EPA/NAREL and Boston University staff participated in a DOE-sponsored public information meeting in Paducah, Kentucky. Information about ATSDR and our public health assessment process was provided to public attendees and interested parties from other involved agencies. Time was also spent gathering information from local resources and site records.

PANTEX PLANT, TX

On October 7, 1996, ATSDR provided the Pantex Plant Citizens' Advisory Board

members with copies of the ATSDR Site Summary Report for technical review and comments. At subsequent meetings with the Board, ATSDR and the State Health Department discussed the report findings.

Off-site radiation exposure levels to the public living near the Pantex plant are too low to measure accurately and are well below levels of public health concern. The levels of radioactivity in drinking water are below the current Safe Drinking Water Act requirements. No adverse health effects caused by radiation are expected.

PORTSMOUTH GASEOUS DIFFUSION PLANT, OH

On November 20, 1996, ATSDR released the final public health assessment for the Portsmouth Gaseous Diffusion Plant. ATSDR found that off-site contamination was not at a level that could cause adverse health effects. The plant releases hydrogen fluoride as part of the uranium enrichment process, but the releases represent no apparent hazard to human health.

ROCKY FLATS, CO

ATSDR received a request from DOE for a review of the Operable Unit 3 Final Remedial Investigation (RI) report. We were asked to specifically address the contaminant data, the interpretation of the Human Health Risk Assessment portion of the RI, and the adequacy of the selection of the contaminants of concern. Operable Unit 3 consists of publicly accessible land outside the fenced boundaries of the site. ATSDR requested the supporting data and will draft the consultation during the next quarter.

WELDON SPRING, MO

During the public health assessment public comment period, ATSDR received comments from federal and state agencies and community members. ATSDR is currently addressing those comments. ATSDR also received additional data from the State Department of Natural Resources. Although ATSDR does not anticipate that the data will change the recommendations or conclusions in the public health assessment, it will be reviewed before issuing the final public health assessment.

HEALTH STUDIES

HANFORD RESERVATION, WA

Hanford Fetal Death and Infant Mortality Analysis Project: This project is to investigate whether rates of infant mortality and fetal death differ according to the Iodine-131 exposure classification of the mother's residence at the time of birth in an 8-county region near Hanford for the period 1940 through 1952. Collection of birth certificate information began in December 1996 and has been completed for three of the 8 counties in the study area. Collection of data from death and fetal death certificates will begin in February 1997.

Iodine-131 Exposure Subregistry: The purpose of this study is to assess long-term health consequences to the general population from past exposures to Iodine-131 and other radionuclides. The protocol has been written and approved, the questionnaire created, the ATSDR Internal Review Board approvals obtained, and contractor work orders written for data collection. The protocol was submitted to the Washington State Human Research Review Section in the first quarter, FY 1997 for review and approval. ATSDR has submitted a supplemental budget request to DOE to support conduct of the study.

Medical Monitoring: In coordination with the Hanford Health Effects Subcommittee and an expert working group, ATSDR developed a draft document entitled "Consideration of Medical Monitoring at Hanford." An initial medical monitoring program would provide medical evaluation of thyroid and parathyroid conditions for eligible clients and refer them for further evaluation and, as appropriate, treatment. The document has completed technical and peer review. ATSDR is currently using the document to make a final determination and recommendation on whether a medical monitoring program should be initiated. It is anticipated that the decision will be made in the second quarter, FY 1997. If a medical monitoring program is recommended, an initial program will be developed.

HEALTH EDUCATION

SAVANNAH RIVER SITE, SC

The final report for the health education needs assessment was received from Citizens for Environmental Justice. The recommendations will be considered in planning future health education and promotion activities in support of communities near the site.

The report findings were shared with approximately 50 community representatives.

LOS ALAMOS NATIONAL LABORATORY, NM

The health education needs assessment protocol was received from The Rural Alliance for Military Accountability, the group conducting the assessment. An advisory group which included tribal and community leaders, local government representatives, and health education professors from the University of New Mexico has been formed to guide the assessment process.

The health education needs assessment methodology developed for ATSDR by the National Association of City and County Health Officials has been modified for utilization in the rural, multi-cultural setting surrounding Los Alamos.

HANFORD RESERVATION, WA

ATSDR met with the tribal council representing the 9 tribes near the Hanford Nuclear Reservation. Staff developed a resources assessment tool for utilization by the tribes in determining existing tribal capacities for providing community education and support

services related to the site. The instrument was presented to the tribal council and assistance in completing the assessment was offered to the individual tribes.

TOXICOLOGICAL PROFILES

- The profile on uranium (including depleted uranium) profile has been submitted for external peer review.

- The draft profile on ionizing radiation is undergoing internal review.

- The Priority List of Hazardous Substances at DOE National Priorities List (NPL) Sites has been finalized. This list is similar to the CERCLA Priority List of Hazardous Substances, and will help prioritize the selection of candidate substances to develop toxicological profiles. This priority list is based on the frequency of occurrence at DOE NPL sites, toxicity, and human exposure potential. This list is composed of two parts: radionuclides and non-radionuclides.